

Part Two: The How's and the Hay

Course Doewiew

Working through your "how"

You've got your sheep- now what?

Nurtition Needs for Wool Production

Nutritional Needs for the best fleece

After the Why-Comes the How...

How can you adjust your farm to suit your flock? How many sheep can you responsibly raise? How does your feed effect your fleece?



The "How"...

How can you adjust your farm to suit your flock?

Sheep are a very adaptable type of livestock to raise. In some cases, a tree line will be all the shelter that a flock requires. Some shepherds prefer full barns for their protection from the elements and additional storage space. Each of these comes with its own sets of challenges. Each producer needs to evaluate their resources, their goals and plans for their flocks and their individual needs.





Sheep do not necessarily need a full barn. Using a tree line, or anything that will block the wind and elements, will give your sheep a safe place to seek refuge and shade.

A three sided shed structure can also provide your sheep a safe place to get out of the rain or sun. Some simple structures can be permanent or can be mobile giving you the ability to move the structure for rotational grazing or as needs arise.

Provided that you are aware of the unique needs of your breed and that your sheep have access to the right nutrition, sheep can easily thrive in a minimalized sheltered environment.



The advantages of a permanent barn structure are something to consider as well. As you begin to the set your goals for your flock and wool production, a permanent shelter may be the best investment for you. In Kentucky, many old tobacco barns have been converted to sheep barns with addition of gates, stalls and proper bedding.

Barns give producers the ability to close in their sheep, safe from predators and elements. It can also prove beneficial at shearing time, when sheep can be kept dry and off from feed prior to shearing.





For wool sheep, the time spent In the barn should be kept at a minimum. A common thought amongst wool producers is that sheep in the field are cleaner sheep. The more time sheep spend inside, the more they will bed down in the dirt, straw and feed in the barn, the more vegetable matter will get into the fleece and more processing it will take to get the full value from your fleece.

Sheep in the open are also far less likely to contract respiratory issues than sheep kept inside. Pnemonia and "barn cough" are common in sheep kept indoors. The management and cost of labor and bedding to keep sheep inside should also be a deciding factor in how you house your livestock.



Knowing your environmental conditions during your scheduled lambing time should also be a deciding factor of your shelter needs.

Are you planning to lamb in January or Feburary when the weather could be harsh and unpredictable? You may need to secure your ewes out of the elements to ensure their safety and the well being of your lambs. If you are planning a later spring lambing, many ewes will do just fine lambing in the open. Having a plan and knowing your contingencies is key.

Barns can add to the expense of your operation, but may also add convenience and viability of your flock.





Feeders, a fresh water source and some small, portable gates are all that are needed as basic equipment. The gates can be used to seperate your sheep, provide jugs for lambing, contain sheep for veterinary or maintenance needs etc.

Basic fencing requirements can be met by using conventional woven wire or multi-strand high tensile electric wire for boundary fencing and electric fence for cross or interior spaces.

Additional equipment for the maintenance of your flock can be acquired as needed, but your basic equipment needs, as stated above, are the most important place to start.



In Kentucky, coyotes and dogs are the primary predators of sheep. The key to preventing sheep losses due to predators is to use management practices that keep sheep and predators apart.

Livestock Guardian Dogs (LGDs) are the most popular choice with sheep producers, though donkeys, llamas or alpacas have been known to also be effective .guardians. The most popular LGD breeds are the Great Pyrenees, Akbash and Anatolian. These large breeds have been selectively developed to protect livestock, but the dog must be handled and trained properly to be effective.

effective.



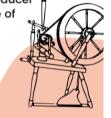


How many sheep can you responsibly raise?



Though the stocking rates vary from farm to farm, according to Dr. Ely from the University of Kentucky, the average farm can sustain 4–5 ewes and their lambs per acre of pasture. This number could be lower or higher dependent on the quality of the pasture and if regemented rotational grazing is practiced.

The highest cost for the wool producer is the land and the maintenance of the pasture.





Setting up a realistic farm budget will help producers retain control of their financial investments and know their cost breakdown per fleece.

The costs associated with wool producing include, but are not limited to:

- livestock cost
- feed costs
- health and veterinary costs
- machinery, fuel and repair costs
- shearing costs
- facility costs





...the hay.

Wool is a protein fiber made up of amino acids, fat, calcium and sodium.

Nutrition is key to growing beautiful, strong and valuable fleeces. Growing your fleece is a year long endeavor and the nutritional needs of your sheep will vary throughout the year.

Knowing your sheep's seasonal needs, watching their health and the health of your pasture will affect your shearing day harvest.



Pasture and quality hay should be your flock's main source of nutrition. Depending on the quality of your pasture and environmental conditions, you may need to supplement at certain times of the year.

Hay quality is weather dependent and can vary from farm to farm. Pasture that has been cut too late, or too early, or received too much or too little rain will greatly vary the nutrients it provides.



The minerals you offer your sheep are also vital in the fleece they grow. Quality mineral mixes are widely available and should be offered at all times along with fresh water.

Be careful to watch the labels of your mineral and feeds for copper. Use sheep specific minerals and feeds to keep your flock within the safe amounts of each mineral. Copper toxicity can be fatal to your sheep.

Mineral blocks, though convenient, can be bad on your sheep's teeth. Use loose mineral when possible.



During the fall and winter, especially in pregnant ewes, careful consideration needs to be made in watching your sheep's protein and amino acid intake as they are not only maintaining their body, but also their lamb and their wool growth.

A pregnant ewe will have the most variable nutrition needs of your flock and their fleece may take the brunt of it if proper supplementation and minerals are not offered.



Wool contains 2.7 to 5.4% sulfur. The finer the wool, the higher the ratio of sulfur. Sheep must maintain a balanced intake of protein throughout the year to avoid weakened areas in their fleeces.

Sulfer-containing amino acids are usually readily avaible in forage while it is green, but what you supplement should be monitored during the fall and winter to make sure that appropriate levels of this important macro-mineral and proteins are kept in balance. Balance is key, as too much sulfur can also lead to coarser fiber while too little can result in weakening or breakage in your fiber.



For a more detail nutrition plan, please consider taking the Masters Small Ruminant Nutrition Course and/or Grazing School.



When raising wool sheep, the way you feed means a lot to the wool value. If your hay and grain is full of seeds, it is very likely your fleece will be also.

Feeding out of a feeder and/or using square bales will reduce the amount of vegetable matter that your sheep will pick up. Careful not to pour your sheep's grain over their heads or backs as it will get caught in the fleece.

To avoid wool contamination of dust and grain pieces in your fleeces, use whole grains instead of crushed when possible.



Reducing the exposure to dirt, dust and vegetable matter can be a trying task with sheep who can get overly eager during feeding times, but it will make skirting and processing your fleeces easier.

Proper care and attention to your flock's nutrition will be evident in your shearing clip. Keep records of your sheep's health and feed to get the most accurate overview of how your sheep's fleeces respond to your feed management.